



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,938	10/23/2000	Ashwin Sampath	Sampath 3-24-7	8514

7590 12/05/2003
Troutman, Sanders, Mays & Valentine
c/o John E. Curtin
1660 International Drive
Suite 600, Tysons Corner
McLean, VA 22102

EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
----------	--------------

2685

7

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,938

Applicant(s)

SAMPATH ET AL.

Examiner

Charles Chow

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3, 5-7, 10-14, 18, 24-27, 31, 43-45, 47, 49-51, 54-56, 60, 66-68, 72, 83 are rejected under 35 U.S.C. 102(e) as being anticipated by Padovani et al. (US 6,222,830 B1).

Regarding **claim 1**, Padovani discloses a frame selection system (Fig. 1/Fig.3) comprising a base station (BST 102 A-C, Fig. 1) adapted to generate at least one enhanced frame 305 (Fig. 3, col. 7, line 33 to col. 9, line 18) having the frame quality FQM inserted (abstract, each base station performs various error detection procedures and place the result into FQM for transmitting to base station controller BSC, for frame selection at BSC based on the FQM).

Regarding **claim 3**, Padovani discloses above in claim 1 for generating of a primary enhance frame 305.

Regarding **claim 5**, Padovani discloses the base station is further adapted to generated at least one error burst representation with the CRC 304, Yamamoto metric 302, signal error rate FF-Ser 307 (col. 7, lines 43-67).

Regarding **claim 6**, Padovani discloses the base station storing the error burst representation FQM 308 into the frame 305 (Fig. 3, abstract, col. 2, lines 51-64).

Regarding **claim 7**, Padovani disclosed the error burst representation 304,302,307 are stored within the FQM frame quality field.

Regarding **claim 10**, Padovani discloses the wireless communication base station (in Fig. 1, col. 3, lines 29-32, col. 3, lines 41-42).

Regarding **claim 11**, Padovani discloses a frame selection system of the BSC 104 based on the base station's quality metric inserted into FQM 308 (as shown above). Padovani discloses the error detection procedure to generate burst representation associated with a field or section of a frame (the given segment of data for CRC in col. 1, lines 55-57; the Yamamoto metric in col. 1 line 64 to col. 2, lines 18).

Regarding **claim 12**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 13**, Padovani discloses a base station controller BSC analyze the error burst representation, CRC, Yamamoto metric, FF-Ser, within the enhance frame (abstract, col. 2, lines 63-64; col. 8, line 63 to col. 9, line 2).

Regarding **claim 14**, Padovani discloses the FSU (selector system 404 of BSC 104, Fig. 4; col. 8, lines 32-54).

Regarding **claim 18**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 24**, Padovani discloses a frame selection system of the BSC 104 based on the base station's quality metric inserted into FQM 308 (as shown above). Padovani discloses

the error detection procedure to generate burst representation associated with a field or section of a frame (the given segment of data for CRC in col. 1, lines 55-57; the Yamamoto metric in col. 1 line 64 to col. 2, lines 18).

Regarding **claim 25**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 26**, Padovani discloses a base station controller BSC analyze the error burst representation, CRC, Yamamoto metric, FF-Ser, within the enhance frame (abstract, col. 2, lines 63-64; col. 8, line 63 to col. 9, line 2).

Regarding **claim 27**, Padovani discloses the FSU (selector system 404 of BSC 104, Fig. 4; col. 8, lines 32-54).

Regarding **claim 31**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 43**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 44**, Padovani discloses the FSU (selector system 404 of BSC 104, Fig. 4; col. 8, lines 32-54).

Regarding **claim 45**, Padovani discloses a frame selection method (as shown in his claims 1-6, abstract, summary of invention). Each base station for generating enhance frame with

Art Unit: 2685

FQM and burst error representation, CRC, Yamamoto metric, and FF-Ser as shown in Fig. 3, col. 7, line 33 to col. 9, line 18).

Regarding **claim 47**, Padovani discloses above in claim 1 for generating of a primary enhance frame 305.

Regarding **claim 49**, Padovani discloses the base station is further adapted to generated at least one error burst representation with the CRC 304, Yamamoto metric 302, signal error rate FF-Ser 307 (col. 7, lines 43-67).

Regarding **claim 50**, Padovani discloses the base station storing the error burst representation FQM 308 into the frame 305 (Fig. 3, abstract, col. 2, lines 51-64).

Regarding **claim 51**, Padovani disclosed the error burst representation 304,302,307 are stored within the FQM frame quality field.

Regarding **claim 54**, Padovani discloses a frame selection system of the BSC 104 based on the base station's quality metric inserted into FQM 308 (as shown above). Padovani discloses the error detection procedure to generate burst representation associated with a field or section of a frame (the given segment of data for CRC in col. 1, lines 55-57; the Yamamoto metric in col. 1 line 64 to col. 2, lines 18).

Regarding **claim 55**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 56**, Padovani discloses a base station controller BSC analyze the error burst representation, CRC, Yamamoto metric, FF-Ser, within the enhance frame (abstract, col. 2, lines 63-64; col. 8, line 63 to col. 9, line 2).

Art Unit: 2685

Regarding **claim 60**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 66**, Padovani discloses a frame selection system of the BSC 104 based on the base station's quality metric inserted into FQM 308 (as shown above). Padovani discloses the error detection procedure to generate burst representation associated with a field or section of a frame (the given segment of data for CRC in col. 1, lines 55-57; the Yamamoto metric in col. 1 line 64 to col. 2, lines 18).

Regarding **claim 67**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 68**, Padovani discloses a base station controller BSC analyze the error burst representation, CRC, Yamamoto metric, FF-Ser, within the enhance frame (abstract, col. 2, lines 63-64; col. 8, line 63 to col. 9, line 2).

Regarding **claim 72**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Regarding **claim 83**, Padovani discloses a base station controller BSC 104 evaluates the FQM metric of enhance frame during the process for selecting a frame (abstract, col. 2, lines 63-64).

Art Unit: 2685

2. Claims 37-42, 78-82 rejected under 35 U.S.C. 102(e) as being anticipated by Wallentin (US 6,246,878 B1).

Regarding **claim 37**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Regarding **claim 38**, Wallentin has shown above the selector 166₁₋₂, for the device comprising frame selection unit FSU.

Regarding **claim 39**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 40**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Regarding **claim 41**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 42**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

Regarding **claim 78**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Art Unit: 2685

Regarding **claim 79**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 80**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Regarding **claim 81**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 82**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 4, 19-23, 32-36, 46, 48, 61-65, 73-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Wallentin-'878 B1.

Regarding **claim 2**, Padovani teaches a digital wireless system with base station adapted to generate enhance frame with FQM metrics (as shown in claim 1 above).

Art Unit: 2685

Padovani does not clearly teach the copy of the enhance frame, although Padovani teaches the BSC receiving enhance frame from each base station (abstract).

Wallentin teaches the frame copies, frame F2,1; F2,2; F1,3 (Fig. 6), and frame copy F2,1; F2,2, frame copy F1, frame copy2 F2 (Fig. 5) are the copy of the same enhance frames from MS to each base station (col. 9, line 61 to col. 10, line 7). The enhance frame has quality indicator 8-3 (Fig. 8, col. 10, line 59 to col. 11, line 18). Wallentin teaches the selector combining at DHU130₃₋₁, selector 166, as shown in Fig. 5-7; col. 10, lines 24-58). Wallentin teaches an improved technique for efficient mobile soft handover in RNC controllers based on the diversity frame combining for handling call traffic connection (col. 3, lines 37-57; col. 11, lines 31-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Padovane above, and to include Wallentin's duplicate frame copies and frame combining, such that system could efficient handling call traffic.

Regarding **claim 4**, Wallentin teaches the parallel frame F2,1 in parallel with the frame on 132, output from target RNC 122₂ to source RNC 122₁ (as shown in Fig.6).

Regarding **claim 19**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Regarding **claim 20**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 21**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Art Unit: 2685

Regarding **claim 22**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 23**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

Regarding **claim 32**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Regarding **claim 33**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 34**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Regarding **claim 35**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 36**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

Regarding **claim 46**, Wallentin above in claim 2 teaches the generating of enhance frame copy.

Regarding **claim 48**, Wallentin teaches the parallel frame F2,1 in parallel with the frame on 132, output from target RNC 122₂ to source RNC 122₁ (as shown in Fig.6).

Art Unit: 2685

Regarding **claim 61**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Regarding **claim 62**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 63**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Regarding **claim 64**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 65**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

Regarding **claim 73**, Wallentin has shown in Fig. 6 the frame combining at frame selector 166₂, for combining frame F2,1 and F2,2 and combining frame F2,1 to frame on 132 at frame selector 166₁ (col. 10, lines 8-37; col. 16, lines 8-17).

Regarding **claim 74**, Wallentin has taught above the enhance frames, the parallel frame on 132 and primary frame F2,1 (Fig. 6) having the quality Q 8-3 (Fig. 8). Wallentin teaches the acceptable portion of frame by combining various types of frames (col. 10, lines 51-67).

Regarding **claim 75**, referring to Wallentin in claim 20 above for the combining of the acceptable portion of the parallel frame.

Art Unit: 2685

Regarding **claim 76**, Wallentin teaches the combining frames with acceptable frames as shown claim 20, and Wallentin teaches the same field or section for the combining in col. 9, lines 63-66.

Regarding **claim 77**, referring to Wallentin in claims 21, 22 for the combining of the same field or section of the enhance frame, parallel frame.

3. Claims 8-9, 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Gregg et al. (US 5,490,153).

Regarding **claim 8**, Padovani does not clearly teach the error burst representation comprising error start indicator and error length indicator.

Gregg et al. (also as Gregg in below) teaches the system for recovering of the lost frames by transmitting of the (as shown in Fig. 3-4, col. 4, line 37 to col. 5, line 10, by including the a bit 408 for additional information attached, by adding start bit 410 and block count 412, such that the lost data information can be recovered by referring to the start bit 412 and block count 412). Gregg teaches the efficient recovery of lost frames by including the start bit and block count for re-transmitting the lost information (col. col. 1, lines 49-59; col. 2, lines 23-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Padovane above, and to include Gregg's start bit 410 block count 412 in a frame, such that the lost data could be efficiently retransmitted.

Regarding **claim 9**, referring Fig. 4 and claim 8 above, Gregg has taught the binary code bits for the start bit 410 and block count 412 for the error lost burst counts in binary number.

Art Unit: 2685

Regarding **claim 52**, Gregg teaches the efficient recovery of lost frames by including the start bit and block count for re-transmitting the lost information (col. 1, lines 49-59; col. 2, lines 23-28).

Regarding **claim 53**, referring Fig. 4 and claim 8 above, Gregg has taught the binary code bits for the start bit 410 and block count 412 for the error lost burst counts in binary number.

4. Claims 15, 28, 57, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Bach (US 6,353,742 B1).

Regarding **claim 15**, Padovani does not clearly teach the accepting the enhanced frame if quality is above a threshold, and discard the enhanced frame and request copy if quality is below a threshold.

Bach teaches the base station controller determines the preferred data frame based on the plurality of quality metric sent from base stations (col. 2, lines 23-40). Bach teaches the centralized control select the frame based on the received quality metric which is above a predetermined threshold (col. 7, lines 43 to col. 8, line 2), and base station controller does instruct base station to send request frame (col. 11, lines 6-8). Bach teaches the efficient technique for sending frame to base station controller based on the judgement of the received quality metric, for efficient frame transmitting, using predetermined quality threshold .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Padovane above, and to include Bach's predetermined quality threshold

Art Unit: 2685

for transmitting frame, such that the transmitting of the frame could be efficiently performed based on a predetermined quality threshold.

Regarding **claim 28**, referring to Bach in claim 15 above for the accepting the enhanced frame if quality if above a threshold, and discard the enhanced frame and request copy if quality below a threshold.

Regarding **claim 57**, referring to Bach in claim 15 above for the accepting the enhanced frame if quality if above a threshold, and discard the enhanced frame and request copy if quality below a threshold.

Regarding **claim 69**, referring to Bach in claim 15 above for the accepting the enhanced frame if quality if above a threshold, and discard the enhanced frame and request copy if quality below a threshold.

5. Claims 16, 29, 58, 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Bach, and further in view of Hendrickson et al. (US 5,974,584).

Regarding **claim 16**, Padovani and Bach does not clearly teach the threshold is associated with the error burst length.

Hendrickson et al. (also as Hendrickson in below) teaches the second predetermined threshold of the number of errors (error length) in a frame which is used to accept the frame for constructing the output signal, and none of the data portion of the subsequent frame are used until parity error is less than a second threshold (col. 10, lines 9-15; col. 11, lines 11-16). Hendrickson teaches an improved efficient of error controlling for discarding received

Art Unit: 2685

data information when the received frame contains more than a threshold number of erroneous segments (abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Padovane above, and to include Hendrickson's threshold for number of erroneous segment in a frame, such that system could efficiently controlling the received frame based upon the threshold for number of error in the frame.

Regarding **claim 29**, referring to Hendrickson above in claim 16 for the threshold is associated with the error burst length.

Regarding **claim 58**, referring to Hendrickson above in claim 16 for the threshold is associated with the error burst length.

Regarding **claim 70**, referring to Hendrickson above in claim 16 for the threshold is associated with the error burst length.

6. Claims 17, 30, 59, 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padovani in view of Bach, and further in view of Neumiller et al. (US 6,226,283 B1).

Regarding **claim 17**, Padovani and Bach does not clearly teach the adjustable threshold, although Padovani has taught above the error burst length in the CRC, the Yamamoto metric associated with the error location.

Neumiller et al. (also as Neumiller in below) teaches the frame quality indicator FQI which can be dynamically adjusted to be the adjustable threshold for the forward error correction FEC (col. 4, lines 1-34). Neumiller teaches the efficient frame selection and routing based on the FQI, having the adjustable threshold for the FQI, such that frame selection can be flexibly

Art Unit: 2685

selected based on the configurable threshold for the particular situation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Padovane above, and to include Neumiller's adjustable threshold for the FQI, such that system could efficiently select and route the frame to the target base station.

Regarding **claim 30**, referring to Neumiller in claim 17 above for the adjustable threshold, associated with the error length and error location.

Regarding **claim 59**, referring to Neumiller in claim 17 above for the adjustable threshold, associated with the error length and error location.

Regarding **claim 71**, referring to Neumiller in claim 17 above for the adjustable threshold, associated with the error length and error location.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. US 6,631,126 B1, October 2003, Berliner et al. teaches the wireless communication using packet selection and distribution function FSD for controlling soft handoff among base stations (abstract, Fig. 4-5B, summary of invention).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Art Unit: 2685

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306 (for Technology Center 2600 only)

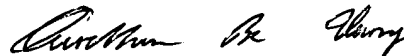
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow C, C,

November 10, 2003.



QUOCHIEN B. VUONG
PRIMARY EXAMINER